

THE LEISURE HOUR.

A FAMILY JOURNAL OF INSTRUCTION AND RECREATION.

"BEHOLD IN THESE WHAT LEISURE HOURS DEMAND,—AMUSEMENT AND TRUE KNOWLEDGE HAND IN HAND."—*Courper.*



THE RESCUE.

WITHOUT INTENDING IT;

OR, JOHN TINCROFT, BACHELOR AND BENEDICT.

BY G. E. SARGENT, AUTHOR OF "THE CITY ARAB," ETC.

CHAPTER XXXIV.—A NOT UNCOMMON CHAPTER IN LIFE.

SOME years before the occurrence of the events recorded in the former part of our narrative, Mr. Sedley, a professional gentleman, pretty well off in the world, and with a good position in society, having taken umbrage at some slight offered him

in the county town where he had imagined his influence to be paramount, hastily made up his mind to leave the country.

In pursuance of this design, he first of all disposed of his practice; sold the house in which he lived, and the greater part of his furniture; went into lodgings; and then, when all these steps had been taken, began to study the science of emigration in connection with the numerous and various British colonies scattered over the face of the globe.

If Mr. Sedley had had only himself to please, the matter would have been of smaller consequence than it was. But he was a married man, and was, in sequence, the father of some half-dozen sons and daughters. Of these appendages, or encumbrances, as they are sometimes called, such as were old enough to have any opinions of their own were at first rather rebellious; at least, they thought it hard to have to give up the comforts and luxuries of a genteel home in England for the uncertain prospects and advantages, and the certain toils and sacrifices, of an emigrant life. But Mr. Sedley had a strong will of his own, and was especially liable to attacks of obstinacy which sometimes seemed to lead on to remorselessness of purpose, and which, as is usual in such cases, gained strength by opposition. It was natural enough, therefore, though not necessarily judicious, that he should silence the objections of these younger members of his family by the unanswerable argument wrapped up in "*Le roi le veut.*"

As to Mrs. Sedley, the meek-spirited wife, it was sufficient for her to know that she must follow in her husband's wake. Had she not vowed to "love, honour, and obey"? So, without any fruitless remonstrances, she prepared quietly to fulfil her duty.

As, however, my story is about John Tincroft, I must follow the fortunes of the Sedley family only so far as they relate indirectly to the continuance of his history. Briefly, then, after long pondering on the subject, and consulting as many authorities as he thought expedient, the ex-lawyer fixed on the then almost *terra incognita* of Australia as his general, and the part of it known as New South Wales as his particular, destination.

Those were not the times of fast clippers, to say nothing of ocean steamers. As Mr. Sedley, however, could afford to pay good passage-money, he and his set sail one day in late summer from Gravesend, under comparatively comfortable circumstances.

The voyage was attended with the usual variety of monotonous incidents. It was long and wearying; but it came to an end; and about the commencement of the Australian summer, the party landed at Sydney. Not long to remain there, but to proceed a good way up the country to a farm or settlement, which, on the representation of an advertisement, and forgetting his professional caution, the gentleman had purchased without seeing.

The bargain, probably, was not a bad one, after all; or it might not have been, in the hands of one who understood the ins and outs of a pastoral life at the Antipodes. But, unfortunately, Mr. Sedley would have been at his wits' ends on an English farm; for farming comes no more by nature than gig-driving. Very soon, therefore, he found himself altogether beyond his wits on an Australian settlement. In other words, misfortunes rapidly set in upon him; and to add to his embarrassments, one of those periodical times of depression to which all new colonies are more or less subject, fell upon New South Wales. Happily for the Sedleys, their whole property was not invested in land and stock, and they outdure the storm. After the lapse of a year or two, their circumstances began to amend; and they had their share in the returning and increasing prosperity of their adopted country.

But while regaining his lost ground in this respect, Mr. Sedley had still reason to regret the course into which he had been driven by the impulses of his unreasoning obstinacy. In England he had main-

tained a certain position in social life for which he was very well suited, and in which were combined and concentrated a good many rational pleasures, counterbalanced, it is true, by a liability to be slighted and mortified occasionally. In Australia he had none with whom to dispute precedence, or to stand up for his rights, simply because he had no such neighbours. He was "monarch of all he surveyed," it is true; but then it was because he had no equals or fancied superiors his "right to dispute." Wife and children—an ignorant and awkward and untoward woman-help who had come out to the colony under the pressure of circumstances, and at the expense of the home government—a shepherd and hut-keeper (obtained under similar advantages or disadvantages), who drew monthly rations and smoked strong tobacco, and otherwise comported themselves as free and independent savages in a shanty some three miles away—a rough-and-ready bush carpenter and blacksmith, with a rather more civilised groom of the stables at home, and one or two farm labourers, who called Mr. Sedley their "boss," obeying him when it suited them, and setting him aside when it did not, formed the whole of the community within a radius of some ten miles in every direction.

Now, this was not, in all respects, pleasant to Mr. Sedley. Authority is gratifying, no doubt, under certain conditions, and when it can be enforced. But in this case, those conditions were wanting, and all that Mr. Sedley got for his occasional outbreaks of despotic temper was the timid fear of those to whose confiding love he thought he had a right, and the contempt and daring rebellion of the few to whom he looked for unlimited obedience.

If Mr. Sedley was disappointed in his fancy-drawn pictures of an emigrant life (on which he ought never to have entered, because totally unfitted for it), his wife and children were confirmed in their prophetic dread of it. To have exchanged a respectable family mansion in a quiet country town, a bevy of well-conducted servants, a circle of friends and acquaintances, the delights of leisurely occupations, the conveniences of life in general, for a rough log-house in what to them was a desert, with all its disadvantages and drawbacks, was simply disgusting. They had not been accustomed to hardships, and the freedom they might have exercised and enjoyed in their new home, and which to many others would have been a boon of price, was to them mere slavery. We have thought proper to draw attention to, and to dwell for a minute or two on, this state of things at Sedley Station, as the settlement was called, for a reason of our own. It is a benevolent one: let this suffice.

To go on with our episodal sketch.

The Sedleys were to pass through deeper trials than the disappointments and coarse toils of an emigrant life. Not many years after their settling down at the station, a fever (introduced, as was supposed, by a miserable, half-starved wretch who was loafing his way from settlement to settlement professedly in search of work, and who was taken in, out of charity, and suffered to remain for some days to recruit his strength), broke out among them. Only those who have passed through a like experience can fully enter into the terrors of that time. At first, recourse was had to the family medicine chest which the Sedleys had brought out with them from London. This failing, the nearest doctor was

sent for. He lived full thirty miles away, and he came to find two of the stricken ones already dead, two in a state of collapse, the remaining two in the earlier stages of the fever, and the parents, who had been deserted by their faithless helps at the outbreak of the sickness, in almost speechless agony of mind, and worn out with bodily fatigue.

A few weeks later, and the home was desolate. Of all who had, a few years before, left a happy home in England, only two remained—the father, prematurely aged, and Helen, a maiden of fifteen; the fever had carried off all beside—the mother last of all. She had been spared, upheld as it seemed by the strength of a mother's devotion, till her services were no longer needed, and then she, too, was stricken down.

CHAPTER XXXV.—HELEN.

Time softens sorrow, especially to the young. Helen Sedley had felt, with all the poignancy of a daughter's and a sister's grief, the bereavement of which we have told. But as months and, afterwards, years passed away, her tears ceased to flow as she thought of the lost ones; and she bent herself with more determination to the duties in life which lay before her.

She had need enough to do this, for her path was rough, and her duties were severe. The infirmities of age were fast gathering and concentrating themselves upon Mr. Sedley, and through these the infirmities of his natural temper became more and more glaring. To Helen, indeed, he was gentle and loving; to his dependents he was as morose and arbitrary as the conditions of their service permitted or enabled him to be, and the kind-hearted girl had constantly to watch for these outbursts of anger, so as both to moderate their fury and to prevent their worst consequences.

We have hinted that some of the servants at Sedley Station were of the convict class. Indeed, the labour market of the colony was, at the time of which we write, in a great measure supplied by convicts on ticket-of-leave. Many of these turned out valuable servants. In fact, knavery, at any rate on a small scale, was too bad a trade to fall back upon; it paid a transported housebreaker or pickpocket much better to practise honest labour. The spell, therefore, was to a great extent broken. At the same time, there were desperate characters among the convicts whom no discipline could tame, and whom experience could not teach; and there is no doubt that such as these were an element of danger to all concerned.

The men whom Mr. Sedley first engaged, or rather obtained from the proper authorities, as his bond-servants, had worked out their time and disappeared soon after the terrible blow fell on him and Helen. But others of the same class succeeded, and it was between these and her father, when in his moods of obstinate despotism, that Helen had so frequently to mediate, or afterwards to interpose the balm of soft and kindly words to the chafed and galled.

"Your father may thank you, Helen Sedley, for being in a whole skin at this present," said a man to her one day, when Sedley had been more than usually violent in his language and bearing towards him for having, in some trivial matter, disobeyed his orders. "He taunted me with having been lagged, as you heard, Miss Sedley; and it isn't the first nor

the second time, and my opinion is that he will do it once too often. He threatened me with Norfolk Island, too, did he? Let him take care that he isn't sent to a darker and narrower hole than Norfolk Island one of these days."

"You must not speak so to me, Styles," said Helen, firmly, though her heart secretly fluttered at seeing the dark eyes of the man glisten, as with the wild-fire of rage and vengeance, while he was speaking. But Helen, though scantily twenty years old, was wise and brave as well as good and kind; and she knew that she must not show signs of fear.

"I must speak, Miss Sedley," rejoined the man, respectfully enough so far as Helen was concerned, but doggedly and fiercely too; "if I don't speak here and now, I shall talk to another purpose somewhere else, and at some other time, not far off, perhaps. Look here, Miss Sedley, in the old country I was as good a man as your father, I reckon, though I mightn't have had his education. At all events, I wasn't a lawyer, as he was—so I have heard, at least. But I was a gentleman's son, and might have been a gentleman myself at this time, if it hadn't been for—there, never mind. But I don't forget what I was once; and 'tis hard lines to be treated worse than a dog, as your father treats me."

"I have told you many times, Styles, how much I feel for you—for all who are in your unhappy position," said Helen, softly; "and now I ask you for my sake to make allowances for my father."

"He makes precious few allowances for me," retorted the man, gloomily. Nevertheless, he remained waiting to hear what more Helen had to say.

"You know what a loss he—what a loss both of us had to bear five years ago. My mother, my sisters, my brothers—there were six of us then—"

Helen's firmness gave way here.

"I know—that is, I have heard it all," said Styles, more mildly than he had before spoken; "and I am a brute not to make allowances, as you say. But it is hard, Miss Sedley, for all that, to be a—to be what I am, and to feel what I feel at times. It gets over me. Do you know why I was sent out and am here, Miss Sedley?"

"I have never inquired, and I have never been told," the young woman answered.

"It was not for dishonesty; I never stole a penny, I never cheated any man out of a farthing to my knowledge; but I struck a man when I was in a passion, and I struck him hard. I didn't mean to do mischief; I didn't know what I was doing till it was too late. The man insulted me, but not so bad as your father has done the same thing, and I was too high-spirited to stand it. Before he could speak another word the deed was done; he fell down like lead, and he never spoke again."

The perspiration broke out on Styles's forehead and his lips quivered as he spoke; and then presently he added, more quietly and softly,—

"I tell you, Miss Sedley, it isn't safe for your father to go on as he does with others as well as with me. I don't want to hurt him. It is bad enough to have one man's death on the mind, to want to have another. But what has happened once unawares might happen a second time: there's some of the old grit left, I sometimes feel: and setting myself aside, there are others who wouldn't care a straw so they could have their revenge."

"I thank you for your warning, Styles," said Helen; "and I will do what I can to make your

position—I mean to shield you from trouble of any sort. I did not before know what you have now told me; but as you are feeling now the consequences of rash anger, you surely would not give way again to the same temptation?”

“I don’t know why not, Miss Sedley. Life such as mine out here is not so valuable as to be worth keeping. But you speak about my feeling consequences; you don’t know all.” The man’s voice faltered here, and the muscles of his face were painfully moved. “I had a wife—I hadn’t been married a year.” The poor ticket-of-leave man here broke out into a passionate cry, and hastily turned away.

“Don’t speak of it to me, Styles. It only distresses you. Pray to God to give you pardon and strength to bear your sorrow. The Lord Jesus will give you rest and peace. Go to him.”

“Yes, I know, I know,” said the man, again facing his monitress; “but I think for all that the devil would long before now have got the mastery if it hadn’t been for you. Helen Sedley, you are like my Caroline, like what she was; and when I look on you, my heart seems to soften.”

“And have you no hope of being restored to her?”

“No hope. She is dead; she died on ship-board the year after our last parting in prison. She was following me out.” And the man walked slowly away when he had said this.

It was with experiences such as these that Helen Sedley became familiar in her life in the Australian bush. Let it be borne in mind that I am writing of what is now long past. Australian life, whether in bush or towns and cities, has strangely altered since then. But is it to be wondered that, under such circumstances, a feeling of desolation sometimes made the solitary young woman sad, while the need for constant watchfulness and daily labour, not always of the most feminine kind, made her seem and feel older than her years?

As time wore on, Helen had to take active superintendence of her father’s concerns, even to the occasional visiting of the out-station, for he was becoming feeble and forgetful. It was in fulfilment of this duty that she had, soon after the conversation just recorded, to take cognisance of a plot she had discovered (but in which the man Styles had no part), and which had some time been in operation, for seriously damaging the live stock on the distant run. On making this discovery there was no alternative but to lodge an information with the nearest district magistrate; and Helen had, reluctantly enough, but courageously, to be a witness against the conspirators. These were convicted, principally on her evidence, and heavily sentenced. Being remitted to headquarters to undergo a lengthened imprisonment, these men were replaced in the station by others of the same class. But thenceforth it could not be concealed from the Sedleys (father and daughter) that they were surrounded by greater dangers than ever. Is it to be wondered that, in the bitterness of her loneliness, Helen sometimes uttered the mournful plaint within herself, “Oh, why did we ever leave England?”

CHAPTER XXXVI.—THE BEGINNING OF AN ADVENTURE.

On the afternoon of an early day in an Australian spring, a solitary horseman was leisurely enough passing over a longish stretch of plain, bounded

behind him by a forest from which he must have emerged some half an hour or more, and in advance by a range of hills looking blue by reason of distance. On either hand the ground rose irregularly, so as to hide any distant prospect.

The traveller was a tall young man, strongly built, with an open countenance, somewhat sunburnt, expressive of unsuspiciousness and general good-humour, though with a dash of determination in some of the features—especially the firmly-set lips, which, to a physiognomist, might have denoted a certain amount of obstinate determination. An old colonist would, moreover, have discovered at the first glance that the stranger was but a recent importation from the old country.

The horse on which he rode was a serviceable, rough-coated animal, strong-limbed and long-winded, as it had need to be, seeing that though it had already made several days’ journeys, on scant fare and with little stable luxury, it had yet to bear its rider many other days before a day’s rest could be granted. The steed was plainly accoutred, well-bitted, however; and the saddle, though it had seen service, was sufficiently comfortable for both man and beast.

The traveller was clad in homely garb, such as indicated a probable connection with farming and grazing, and behind him was strapped a tolerable sized portmanteau, most likely containing necessary or desirable conveniences for his journey; while a haversack suspended over his shoulder showed that he had provisioned himself against one of the inconveniences of desert travelling—a lack of hospitality on the road. This was likely enough to be his experience. He had left a township where he had passed the preceding night, some forty miles behind him, with the expectation of having to camp out after sundown, or when his horse and himself should be too tired to proceed further; and he had journeyed on all day without any signs of human life. He had been told, indeed, that there was a station near the road where he might possibly obtain accommodation; but the character given of its owner was not sufficiently inviting to induce him to turn aside from his course.

He had only recently rested on the bank of a narrow creek, or streamlet, or irregular water-course, where he had refreshed himself and his steed, and guided partly by the direction of that stream, partly by a pocket compass, was steadily renewing his journey, when a loud, long-continued cry smote suddenly upon his senses. New as he evidently was to bush life in the colony, the young man might have mistaken the sound for the far-off call of some strange bird or beast, if it had not been repeated with greater distinctness, which enabled him to recognise in it the far-extending call of a human voice, peculiar, we believe, to the Australian world in the prolonged shout of “Coo-ee.”

A tightening of the bridle brought the obedient horse to a standstill, while the rider listened again to hear the sound, but this time in fainter tones, and accompanied by a shriller shriek, as of one in agony or bodily fear. The traveller did not hesitate any longer, but turning his horse’s head in the direction whence the sounds seemed to come, he applied spurs and whip, and was the next minute galloping towards the summit of the irregular incline on the left hand, which, as we have said, had shut out any distant prospect in that direction. Arriving at the summit,

he beheld, at the distance of some quarter-mile beyond, a scene which quickened at once his pulse and his movements. Two horses were running loose on the open plain, others were hobbled near a clump of trees, and were consequently unable to enjoy the same liberty. Close by this clump of trees, also, a desperate struggle seemed to be in progress—as far as the stranger could make out—between three men, one of whom was desperately resisting the combined efforts of the other two to bear him to the ground. Besides these, a female appeared to have been taken captive by a fourth man, who was dragging her by the arm towards the hobbled horses.

In much less time than it has occupied in telling, the young traveller had taken in the whole of these details, and was hastening to the rescue as rapidly as the impetus of whip and spur could act upon the frightened animal he bestrode.

Fast as he rode, however, the changes in the strange drama on which he kept his eye fixed were outstripping him. In one of these changes, the report of a pistol-shot reached his ear; and a puff of smoke for a moment veiled the woman and her assailant. Only for a moment, and when it had passed, greatly to his astonishment, the spectator perceived that the man was staggering backward and falling, and that the female, instead of making her escape, was in the act of springing forward to the help of the one who, in the part of the scene first described, was evidently on the point of being overcome in the odds that were against him.

There was no time for reflection; and once more applying the spur, the traveller, ere three minutes had passed away, added another to the fierce conflict. What occurred then he never afterwards remembered consecutively. He knew only that, first throwing himself off his horse, and then into the fray, he received a heavy blow on his head, which, thanks to the felt hat he wore, did not stun, though for an instant it confused him. That by this time, one of the two men—who might be rogues or honest men for anything he knew, all his knowledge being that they were two to one—had been stricken by him to the ground, and that the female, whoever she might be, was calling to him for help, but impeding his free action by her unconsciously clinging to him for protection. And that, in a short space of time, as it seemed to him, he and this unknown fair one in distress were apparently master and mistress of the field—two of the combatants having retreated to the trees, unhobbled two of the horses, mounted, and fast ridden away, while two others lay on the turf, at a little distance apart, *hors de combat*, at any rate for the time being.

FIELD-NATURALISTS' CLUBS, AND HOW TO FORM THEM.

With the dawn of spring a multifarious army of recruits from the Saturday half-holiday begins its campaigns for the outdoor season. Cricket clubs and athletic societies of all kinds send out their challenges and make their matches and engagements for the long vista of Saturdays that stretches before them far into the autumn months.

Wishing these muscular fraternities a prosperous time and no broken bones to mar their sport, we shall do well to acquaint ourselves with certain outdoor re-

creation societies of another sort. We refer to the field-naturalists' excursion clubs and local natural history societies of the period. These clubs and societies are fast coming to the front among the popular Saturday afternoon enjoyments of the summer season. Like the cricket clubs and athletic societies, with the first breath of spring—when "the air smells wooingly"—they prepare their campaigns for the season, and leave the fireside delights of natural history for active occupation in the field.

A short sketch of the several classes of field-naturalists' clubs of our cities and towns, with their objects and methods of proceeding, may be serviceable just at this season, and may help to the formation of such societies in districts where they do not at present exist.

The simplest form that a field-naturalists' club can take is found among the silk weavers of Bethnal Green and the mill-hands of the North of England and elsewhere. The Spitalfields weaver has been used to find in Epping Forest a vast preserve and collecting-ground for ferns, funguses, mosses, and culinary herbs. His love for rearing moths and butterflies, and for chrysalis and egg hunting, is traditional. Upon such excursions

"He fears no bailiff's wrath, no baron's blame,
His are untaxed and undisputed game."

Such genuine naturalists speedily find comrades of kindred tastes. Evening meetings of a neighbourly kind soon follow for the exhibition and exchange of specimens, and for dividing amongst the little community the surplus prizes of any one collector. The society has no subscription fee, pays no rent for rooms, and issues no report or "Transactions" for the year. Much precious information which these careful observers could supply is lost to the literature of natural history. Professed naturalists especially would be glad of the calendar of natural phenomena which Epping Forest yields every year to the East Londoner. But the little society answers the ends of its being, which are not public, but private. Of entomological societies alone the Rector of Bethnal Green has brought to light no less than eight in his district. These simple clubs, which have hardly any settled constitution, have obvious advantages. They consist chiefly of neighbouring naturalists, who meet at the house of one and another in a homely way, free of the expenses which the more organised clubs incur.

The next class of clubs to be noticed is many degrees removed from those of Bethnal Green, and is found in smaller towns and the rural districts. It includes the best and most educated naturalists of the country. Its members belong for the most part to the commercial and professional classes. It has an organisation, a secretary, an excursion committee, and an annual subscription of five shillings per head to pay for the printed programme of excursions, etc. If the club issues an annual volume of its Transactions the subscription is ten shillings. If natural history does not supply a basis large enough for a club, archaeology is added. Thus visits to historical sites and ancient buildings in the locality alternate with a foray among the ferns and funguses. The North Staffordshire Naturalists' Field Club is among the most popular and successful of those which are not exclusively natural history clubs. The Woolhope (Herefordshire) Club is famous for the proficiency of its members in local natural history pursuits, for its

actual work and discovery in the field, and for its annual volume of Transactions. During the past year, among other achievements in its district, it has brought to light a "crannoge," or stockaded island—one of those singular lake dwellings built upon piles, which our remote ancestors used as a fastness from their foes. The club has also furnished an account of the remarkable trees of Herefordshire—the mistletoe oaks, and notable beeches, elms, and other foresters of the county. Are there not readers of the "Leisure Hour" in rural districts who can begin (perhaps in a small way at first) to do for their locality what the Woolhope Club is doing in Herefordshire?

It is in London, Birmingham, Manchester, and other large centres of commerce and industry, that we find the largest and most popular field clubs. The members of these commonwealths belong to all classes of society, the illiterate and the literate alike. Working men, business assistants, clerks, students, and professional men swell them until they number five or six hundred members, and go out on the Saturday afternoon sometimes in parties of more than two hundred. Perhaps the London societies are more confined to the business and professional classes, owing to the preponderance of these over the industrial and manufacturing population. Nevertheless, a brief notice of the London clubs and their doings may be fruitful in suggestion to some of our readers in other districts.

The popular natural history clubs of London are the Geologists' Association, the Quekett Microscopical Club, the South London Microscopical and Natural History Club, the West Kent Naturalists' Club, the Sydenham and Forest Hill Microscopical Club, the Hackney Scientific Society, and the Croydon Microscopical Club. Another club for the pursuit of natural history with the microscope is that which has sprung up in the establishment of Messrs. Leaf, Sons, and Co., Old Change. This remarkable society is composed exclusively of the business young men of the house. The results of its work are seen in its annual *conversazione*, of which we recently gave some account, when the members muster among themselves from fifty to seventy microscopes. This exhibition is the most brilliant of the kind that London affords.

Let us now take the mode of action which these larger London societies adopt. The club is constituted with a subscription membership of five or ten shillings annually. Meetings are held fortnightly or monthly for the exhibition of objects, reading of papers, and discussion. A committee of members elected annually provides for a supply of papers to be read, and arranges the excursions for the summer season. Two of the largest societies in London are privileged to meet, almost free of rental, in the rooms of University College—an arrangement which is somewhat paralleled by certain provincial clubs which are allowed the use of the Town Hall rent free. The excursion committee has an important duty cast upon it. If the club is geological, the committee must keep itself informed of any newly opened pits or railway cuttings, in which perhaps the tusks and teeth of the mammoth may be found. A committee of microscopists must know all the ponds of the district in which zoophytes and other specimens can be obtained. Then, too, the railway routes to the various spots have to be carefully looked out before the excursions. Much of the success of the excursion season depends upon this committee.

In London, as well as in other cities, a crowd of field-naturalists assembled at the railway station to catch the first train that leaves town after two o'clock is now happily a familiar sight. A form of outdoor recreation which embraces the Bethnal Green weavers on the one hand, and the Quekett Club and Geologists' Association on the other, may well have some new votaries at this the opening of the field-naturalist's season.

A ROYAL LEGACY.

In the revolutionary year of 1848, when so many thrones were overturned and dynasties shaken, a singular illustration of loyalty occurred in England. It appeared as if passing events kindled in the breast even of a miser the loyal devotion which inspired the whole nation at that time, just as on a recent occasion the respect and affection for the Royal Family was intensified by the coarse attacks of democratic agitators. Be this as it may, in the autumn of 1848 Mr. John Camden Nield made a will, proved in 1852, by which he bequeathed to the Queen a quarter of a million sterling. At the time the sum was greatly exaggerated, even to a million or two millions, but the sum was what we have stated. It is said that with this money Balmoral was chiefly restored and improved.

Some curious facts have come to our knowledge about this legacy. Nield lived usually at Chelsea, No. 5, Cheyne Walk, next door to Mr. Maclise. His father was a silversmith, who had amassed the bulk of the fortune inherited by the miser son. He had property in the parish of North Marston, Bucks. Nield used to go in person to collect his rents, walking, with hard-boiled eggs in his pocket, which he used to eat sitting down under a hedge. On one occasion he appeared to have tried to commit suicide, and was prevented by an attendant whose name was similar (Neal), but in no way related. Neal applied for a pension, on the score that if suicide had been committed, the will not having been then made, the legacy could not have been received. The said Neal was granted, and we believe still lives to enjoy, a liberal annual sum from her Majesty.

The Queen commissioned Sir Digby Wyatt to restore the chancel and the east window of the grand old parish church of North Marston, at a cost of £3,000. This chancel was famous as a depository of that crux of archæologists, the shrine of "Master John Schorne" (13th century), who "conjured the devil into a boot," an exploit immortalised on several stained windows, statues, gargoyles, etc., up and down the country, and upon the very window (but that was long long ago) now filled with exquisite glass, and surmounting fine reredos. Schorne brought up "holy water," now made into a well which never freezes and never fails, of chalybeate and medicinal properties, by knocking his staff on the ground. Immense sums were offered at his shrine, afterwards removed to St. George's, Windsor.

To return to Nield. He was buried by Archdeacon Tattam, famed as an oriental scholar, and subsequently one of the Queen's chaplains. Tattam was a native and formerly a local Wesleyan preacher of North Marston. Anecdotes of Nield's eccentricities would fill many pages. His motto, *Dum spiro spero*, is engraved on shield, under arms, and over inscrip-

tion, on a brass let into the chancel floor of North Marston Church. This is an interesting church for an archaeologist to visit, though we were sorry to see that the repairs and restoration were confined to the chancel, the exterior of the church and the churchyard needing more attention than seems to be within the means of the resident parishioners. The people are chiefly lacemakers and straw-plaiters, branches of industry which are not flourishing as in former times.

We append a correct copy of the will, and of the record of proof in the Court of Probate:—

"This is the last Will and Testament of me, John Camden Nield, of Lincoln's Inn, and of Chelsea, in the county of Middlesex, Esquire. I desire to be buried or placed in the vault under Battersea Church, in the county of Surrey, and as near unto the coffin of my dear father, James Nield, as the crowded state of the vault will readily admit. I give unto my executors hereinafter mentioned and named one hundred pounds each for the trouble they may have in the execution of this my last Will, and subject to the said legacies, which I direct to be paid out of my personalty, and to my just debts (which are of a trifling description). I give, devise, and bequeath all real and all personal estate which I may be entitled to either at law or in equity, at the time of my death, unto Her Most Excellent Majesty Queen Victoria, her heirs, executors, and administrators, for her sole use and benefit; and I pray Her Majesty to be most graciously pleased to accept the same. And I constitute and appoint the person who at my death shall fill the office of Keeper of Her Majesty's Privy Purse, the Reverend Henry Tattam, Archdeacon of Bedford, and James Stevens, of Willesbro', in the county of Kent, gentleman, executors of this my last Will and Testament. In witness whereof I thereunto set my signature, this 10th day of August, 1848.

—J. CAMDEN NIELD. Signed by the said John Camden Nield, as and for his last Will and Testament, at the foot or end thereof, in the presence of us present at the same time, and attesting and subscribing the said Will and Testament in his presence. CHARLES SHADWELL, Solicitor, Gray's Inn; GEORGE STRATTON, Clerk to Charles Shadwell, Solicitor, Gray's Inn."

"Proved at London, 21st October, 1852, before the Worshipful Frederic Thomas Pratt, Doctor of Laws, and Surrogate, by the Oaths of the Honorable Charles Beaumont Phipps, the person filling the office of Keeper of Her Majesty's Privy Purse at the time of the death of the deceased; the Venerable Henry Tattam, Archdeacon of Bedford, and James Stevens, the executors, to whom administration was granted, having been first sworn duly to administer. The Probate was called in, and the Will propounded and proved in solemn form of Law, and sentence was signed, promulged, and given for the force and validity of the said Will, on the 17th February, 1853."

LIEBIG AND THE AGRICULTURAL PROBLEM.

JUSTUS LIEBIG was born in the year 1803, at Darmstadt, where his father carried on a thriving business. The early years of the future professor were not characterised by that precocity which we are apt to look for in the childhood of remarkable men. It is on record that as a schoolboy he sat with a single

companion on the lowest form, and when the school inspector came round he and his fellow-laggard received a very sharp rebuke for their backwardness, flavoured with some unflattering predictions as to their future lot. Many years afterwards Liebig met at Vienna his old partner in disgrace, who there held the honourable post of Royal Director of Music. "The inspector's prophecies did us no great harm," said Liebig. "No," said the other, "it is rather odd that, of all the boys in the school, you and I are the only two who have made any way in the world."

At the age of fifteen, Liebig was sent to study pharmacy under a professor at Heppenheim; but he could not put up with the treatment he met with from the professor's wife, and one day when she ordered him to go and chop wood in the yard he showed a clean pair of heels at once to Heppenheim and to pharmacy, and returned by the first stage to his paternal home. Here his bias towards chemistry began to develop itself, and his father's occupation, which was that of a dyer, offered him a fair field for experiments, which he pursued unremittingly. In this way he prepared himself for the university, and after a time he went to Bonn, and thence to Erlangen. But at that period there was little chemical knowledge to be gained at any German university, and he had to trust mainly to his own genius and industry. In 1822 he left Erlangen, and in the autumn of the same year travelled to Paris, where he attended the lectures of Gay Lussac, Thenard, Dulong, and other eminent men, at the same time studying assiduously at mathematics. He had the great good-fortune to make a friend of the renowned Gay Lussac, who received him into his private laboratory, and made him the companion of his labours. Together they completed a series of experiments upon the nature of fulminating acid, an acid contained in fulminating silver; and it was these investigations, under the generous guidance of the great French chemist, which formed Liebig's first introduction to science.

Liebig now turned his attention to teaching, at the suggestion of Humboldt, through whose influence certain hindrances which stood in his way were set aside. He passed an examination at Giessen, received his doctor's degree, and in his twenty-first year (1824) was appointed associate professor of chemistry at the Giessen University. Two years later he became principal professor of chemistry. It was at Giessen that he carried on those enormous and incessant labours which were to yield such grand results for science and for the welfare of mankind.

The laboratory at Giessen was in his time the most renowned in the world, not only on account of the important researches and discoveries effected under the guidance of the celebrated leader, but also from the number of distinguished scholars who wrought in it; and it was never equalled even by the famous laboratory afterwards established by Liebig at Munich. His genius was the ruling spirit, ordering and controlling everything. Many who under his direction did admirable work could do nothing without him. In chemistry it is usually more difficult to propound a problem than to solve it. When a question is correctly stated there are always heads and hands eager to work it out. Each of Liebig's scholars was entrusted with experiments suited to his capacity. With him there was no mere repetition of old methods—no analysing of granite and feldspar for the hundredth time—but ever some new investi-

gation with a view to some new truth. All that could be learned elsewhere his pupils knew before they came to him. Every day he passed several hours in the laboratory, superintending the methods of operation. The student in a difficulty waited for the master's coming, who, when he came, would perhaps find the difficulty too much even for him to solve at once: then master and pupil would work together, trying fresh experiments or testing hypotheses, to get at results; and thus stores of facts were accumulated, the importance of some of which had to wait years for recognition.

After going the round of his laboratory, Liebig would return somewhat exhausted, at least in his later years, to his private studio, there to run over the day's labours in his mind. It was not often, however, that he was long unmolested in this seclusion. There would come modest taps at his door from some privileged student, eager for some word of counsel which he knew the master was always willing to give.

When Liebig entered on his researches the chemistry of inorganic bodies had been brought to a considerable degree of advancement by Berzelius. He soon discovered that his own vocation lay in the domain of organic bodies, or those endowed with life—that is to say, the animal and vegetable kingdoms.

In this department very little had as yet been done, and only the greatest masters in science had concerned themselves about it. The investigations required the most skilful hands as well as much time and trouble. Liebig saw that if anything important was to be accomplished it must be by greatly simplifying both the methods and the apparatus and abbreviating the operations. We cannot here enter upon a matter which is purely scientific, and we allude to it only to show that the most momentous interests sometimes depend on apparent trifles. Suffice it to say that by his new arrangements Liebig was enabled to get through important work by means of assistants comparatively unskilled, and thus to heap together a huge mass of results upon which he afterwards built up his system. He may be said to have been the creator of organic chemistry, though it was long ere the world, or he himself, became aware of the value of his work.

In the year 1839 he received from the British Association of Naturalists at Liverpool, the honourable commission to draw up a report on the state of our knowledge of organic chemistry, especially in relation to agriculture and manufactures. On setting about the collection of materials for his report, and reducing them to order, he became aware that there was really no certain knowledge existing on the subject—nothing but vague indefinite views, unproved hypotheses, and a mass of palpable error. Such being the case, a report would be of no value whatever; and therefore, if he would execute his commission, he must construct or invent a new science, and present the association with that. In this necessity originated the remarkable work which, in the year 1840, he presented to the British Association at Glasgow, under the title of "Organic Chemistry in its Application to Agriculture and Physiology." In this work the numberless results, chiefly bearing on the composition of organic bodies, which he had been able to secure by the simplified methods above referred to, were utilised; and it may be affirmed that but for these previous researches

(made, as it were, upon trust) the publication of the volume must have been deferred for years. A multitude of new questions, however, had to be solved, and were solved by means of Liebig's revised apparatus and abbreviated operations. The investigations of the constituent elements of both plant and animal had to be completed before anything could be affirmed as to the transmutations undergone by either. When he first entered on the proper chemistry of agriculture he found that the whole business had to be explored from the beginning. In order to understand the process of growth in vegetable bodies, the question had first to be answered, From what sources do plants derive their substance? It was known that all living things consisted of the same primary elements—viz., of carbon, hydrogen, and oxygen, while certain bodies contain a fourth element, nitrogen. The question which had to be met was, Whence do plants derive these, their constituent elements?

As to carbon, which exists in all organic bodies, the established opinion was, that it is derived from the remains of former vegetation preserved in the soil; it was known to be soluble in potash, and to exist in abundance in the turf and peat of grass-grown lands. Liebig saw at once the fallacy of this view, which does not explain how that first vegetation, from whose remains the existing vegetation is nourished, obtained its original elements. It was not conceivable that the constituents of plants should go on increasing with time and yet nourish from their stores each succeeding crop. Liebig gave it as his view that plants derive their carbon solely from the carbonic acid which is contained in the atmosphere, and which arises from the slow combustion of old vegetable remains in the ground—that therefore, although the decayed vegetable matter certainly contributes to the nourishment of the plant, it does not do so in the manner supposed; but that it first passes by oxydation into carbonic acid, and in that form is the food of the plant. Similar views had already been mooted, but merely as guesses, and were not received. The merit of Liebig, in this instance, lay in the fact that he adhered to this view, persisted in affirming it against strong opposition, and rejected all others. The publication thus positively of his new view aroused a savage outcry against him through all Germany. Every *soi-disant* practical chemist asserted that the thing was already known to him, and all of them rushed into print, and quoted published articles of their own to prove their assertions. What they succeeded in proving was simply this—that they were one and all eager to set up a claim to a discovery which as yet they had all failed to understand. The controversy ended in a brilliant triumph for Liebig, and the general acceptance of the new doctrine, which no one now dreams of questioning.

As to the source of the hydrogen and oxygen contained in plants, there was no difference of opinion—the subject presenting no difficulty. Not so with the nitrogen, which in plants appears in a substance resembling the white of egg. It was known that the remains of plants and animals could replace the exhausted nitrogen of the soil,—but here, Liebig showed, the same process occurs as with the carbon: not in the form of albumen or fibrine could these substances be taken up by the plant, but only after they had been decomposed by corrupting, and their nitrogenous contents had passed off in ammonia. The

grand distinction between the origin of plants and that of animals was here at once made plain, viz., that plants live upon inorganic matter and produce organic; and that the animal lives upon the organic matter of the plant, parting with it as inorganic

are borne by the air to every portion of the earth's surface.

But if nothing more were necessary for the support of plants, then agriculture would consist of nothing more than sowing the seed and reaping



Justus Liebig

refuse which can again be applied to the nourishment of the plant. Thus was the connection between the two living kingdoms of nature—a connection which had been often suspected and suggested by men of science—established with wondrous clearness and force. The plant is destined to make new organic bodies: the sugar-cane can take up no sugar with its roots, it must rather make sugar; the rape-plant or the olive cannot be manured with oil, they must both make oil, and for that purpose they require the same materials which the vine requires to make wine, and the poppy to make opium, namely, carbonic-acid, ammonia, and water. These three substances exist as gases in the atmospheric air, and

the crop. Ten thousand experiences, however, show that such is not the case—that, on the contrary, by continued sowing and reaping, land, however rich, is brought sooner or later to an unproductive condition. The reason of this was supposed to be that each plant throws off matter from its roots which is prejudicial to itself but useful to other plants; and this theory was naturally strengthened by the known advantage derived to the land by a change or succession of crops. That this theory was wrong, however, was plain to Liebig from the fact that for centuries the same plants have grown in the savannas and pampas of South America year after year in the same lavish abundance—the only difference between

the savannas and the fields and meadows of the European farmer consisting in this, that the former are never reaped, and the latter are reaped every year or oftener.

It was plain, therefore, that with the reaped crops some materials *must* be taken away which the atmosphere could not replace. Reasoning in this straightforward way, Liebig came upon the great fact which lies at the foundation of modern agricultural science, viz., that the ashy constituents of plants are indispensable to the life of the plant—that the plant without a certain quantity of this unfleeting fireproof matter could not maintain itself. Doubtless Liebig performed labours requiring far more intellectual strength and scientific insight than the discovery of this fact; but it is very certain that all his labours taken together, with all those of his contemporaries thrown into the bargain, have not exercised and never can exercise so enormous an influence on the history of humanity as this simple fact, which now, wherever it is mentioned, passes almost as a truism, and which every intelligent farmer knows as if by rote, and acts out mechanically in the conduct of his business. This discovery was recognised as all-important because it showed how indispensable is the helpful interference of man to the permanent fertility of the soil. No sooner was this law made known than agriculture took a new form. It was seen now that the cultivator of the soil should apply all his energies in restoring to the ground the materials of which his regular crops deprived it. It is true, the use and value of manure had been known from the oldest times, and the refuse and ejecta of the farm had been applied to the land, all the more freely because it was useful nowhere else. But it was not known what the materials were which the manure gave back to the earth; and it had never even been suspected that the manure produced on a farm could in no case suffice to maintain such farm in its full productive power. This was the first grand application which Liebig made of his discovery: he pointed out with mathematical precision that however productive a soil might be, if it was submitted to a course of culture in which no other manure was used than that produced upon it, it must inevitably impoverish itself and become in the end unproductive.

The indispensable ashy constituents of the plant consist of certain acids, salts, alkalies, etc., and they are found in the ashes of plants when burned. They would in the course of nature return again to the soil, but man cannot afford to wait long years for that; they must be replaced as they are wanted, and hence it is the chief business of the agriculturist to procure these materials as cheaply as possible, to maintain his land "in heart." Science lends him a helping hand; she rummages the rocks, the stones, the refuse of the earth, and rifling from them the required ingredients, offers them ready prepared for his use to the farmer. The far-distant shores of the silent sea are explored, and treasures of priceless value which for thousands of years have lain useless are brought home to his door and applied to the purposes of life.

With the due knowledge of the means of nourishment and the composition of animal bodies, came this noteworthy result, viz., that the animal can thrive only by feeding on such plants as contain in themselves the constituent elements of his own body. The vegetable albumen in clover and hay differs only

in form from the albumen of the ox and the bird, and this differs just as little from that in man—so that it is true that the grass of the field supplies the matter of the brain of the thinker.

The discoveries above briefly noticed, which, as the reader sees, led to the solution of the great agricultural problem, also led their author to the unexpected solution of another problem, which if it be less practically useful, is in some respects of even greater significance. Just as a wise ruler is aware that the ignorance, the neglect, or the contempt of the rights of the subject is the cause of public calamity and of the overthrow of governments—so came Liebig to the conclusion that the ignorance and neglect of the laws of nature is the real cause of the destruction of nations and of the revolutions of history. The statement is curious, though exaggerated importance is given to physical over moral causes of decline. When a people have exhausted their soil by the cultivation of centuries, they must either conquer new territory or be conquered by their neighbours. The migrations of nations in past ages have been the consequence of violations of natural laws. The Alarics, the Genseries, the Attilas were the chiefs of famine-stricken hordes driven by hunger from their worn-out lands. The prosperity of Greece was but of brief duration because its soil was so limited: at the time of Philip it was already suffering from want of grain, and to that want, rather than to the Macedonian arms, it succumbed. The permanent dominion of Rome was due to the peculiar policy of the Romans, who compelled the nations they conquered to supply corn to their conquerors, and thus the productive soils of Sicily, Northern Africa, Asia Minor, and other subject States, were made to pour their yearly produce into the granaries of the capital. Never was Italy so populous as at the time of the landing of Æneas, and never was Greece so rich and powerful as at the period which Homer speaks of in his "Catalogue of Ships." Thus, in the course of ages, has the sovereignty of the world transferred itself from the south to the north, because here in the north lay the unexhausted land; and it would as certainly disappear from the north but that we have discovered the natural laws and learned to obey them. In this sense it may be said that chemistry reconquers the earth for mankind, seeing that it has taught us how the land we live in may be made to maintain its fruitfulness, and thus ensured to us for a perpetual possession. The conquerors of antiquity—the Tamerlanes, the Gengis-khans—passed like a hurricane over the earth, and left no trace of their presence save destroyed cities and slaughtered citizens. The triumphs of science are of lasting duration; their traces are the waving cornfields and the cattle on a thousand hills; and while tending to the ever-enlarging growth of human industry, they form the material basis for a permanent peace among the nations of the world.

A BREAKDOWN.

On the other side the Atlantic, if we may credit the coloured minstrels who delineate negro life and character, a "breakdown" means an assembly of darkies, having what may be called a jollification. But this is not the kind of "breakdown" we are

going to look at. Ours is of a more serious character, and the scene of it is a Manchester mill.

It means, in the first place, that the great steam-engine which usually keeps spindles whirling and shuttles flying has come to grief. The displacement of a little piece of iron called a key has turned that usually obedient giant into an instrument of frightful destruction. Happily, the destruction is confined to parts of the engine itself, and neither life nor limb has suffered. But, in a few seconds, an amount of mischief has been done which it will take many busy hands, working day and night, and a large sum of money to repair.

Let us first glance into the engine-house. We can easily do so, for a portion of the brickwork has been displaced to facilitate the removal of the damaged parts of the engine. See that large spur-wheel, some ten feet in diameter, shivered into fragments. The men are busy removing one large portion by the help of a crab and pulleys. They will have many a broken mass to move before they even know the extent of the mischief done in so few seconds. We cannot help them, so we will glance at that vast wrought iron shaft, not broken, but thrown to one side, like a toy from a child's hand, and all crooked into the bargain. See, too, in all directions pieces of machinery which to our inexperienced eyes it would have seemed impossible to break, but which have been snapped like gossamer by the irresistible power of steam.

The owner of the place, a large mill, occupied by three different tenants, looks sadly at the wreck, and repeats the old saying, that "Steam is a good servant but a bad master." He is thinking of more than himself and his pecuniary loss. He knows that the "breakdown" means far more than the extinguished fires below the boilers and the whirling wheels at a standstill, the busy mechanics mending the mischief, and the bills that will follow their labours.

One of the tenants who occupies the cellars and basement story is a maker of spindles and flyers for cotton-spinning. He is very busy, full of orders, for the effects of the ever-to-be-remembered Cotton Famine are passing away, and Lancashire is again looking forward to prosperous times. Every minute is precious to him, and only yesterday he took a journey to ask for more time in which to execute his pressing orders. Our spindle-maker has had another trouble. Easter week and Knot Mill Fair have proved too powerful seductions for many of his "hands" to withstand. And, though the master was worried and anxious by the very pledges of prosperity to come, in the shape of his numerous orders, he has not been able to induce his men to work. Three precious days have passed in almost inaction, and only this morning the hands have returned to their daily labours.

Two hours ago the smiths were working at the forges, the grinders were causing every wheel to carry a circle of flaming sparks, and the whole place was full of life and bustle. Then the breakdown occurred, and this is what it means in the spindle-works. It means that the fires are out, the wheels are still, and, except a few men who are sorting spindles, there is no sign of life in the place.

It means, too, that the wives who were rejoicing at their husbands' return to work and hoping for half a week's wages at any rate, are now looking sad enough under the knowledge that enforced idleness will be their portion for ten days to come. To little

Jack, whose toes are peeping through his old boots, the breakdown means that the new clogs, which mother promised to buy him on Saturday night, will not be forthcoming. It means that articles which cannot be done without will have to be got on credit—that is, if the credit be longer than the purse. If otherwise, it will necessitate a visit to the pawnbroker; and such members of the family as possess church-going, or, perhaps the expression is safer, Sunday clothes, will have to stay at home, because their holiday garments are in the keeping of "my uncle."

This for the workmen and their families. Now for what this breakdown means to the master spindle-maker. It means that orders cannot be fulfilled, goods cannot be finished, and that the frames which are waiting to be filled with spindles in that large machine factory at Leeds must wait longer yet before they can be completed. Nay, more. Our breakdown reaches across the Atlantic, for those unfinished frames ought to be shipped off to America, and if they are not completed in time the machinists will have to pay forfeit for their broken contract.

Now we will go into the large weaving shed, in which are hundreds of looms. Yesterday there was not a single loom standing still. Shuttles were flying like lightning, and the place looked like a beehive, for the machinery stands very close in this department, and the brief holiday of last week has made it hard work to complete some special orders in time. Here, as in the spindle shop, all is silent now. The women weavers are either gone home or standing at the neighbouring corners, talking about the breakdown and speculating as to the time it will take to put things to rights.

A few warpers are occupied in preparing warps in a small place adjoining the weaving shed, but these are the only "hands" left in this department, and their employer is looking much depressed at the prospect of a cancelled order—one, too, which had been taken on unusually advantageous terms. He and the owner of the mill are just consulting the engineer as to the possibility of making that other large engine do a little of its broken neighbour's work, and the face of the weavers' employer brightens as he sees some chance of such a plan being carried out as a temporary arrangement. But the hands know nothing of this prospect, and we will follow one or two of them to their homes.

We pass the engine-house on our way, and are greeted with the information that, in addition to all the damage which was at first apparent, that immense fly-wheel, far larger than the spur-wheel before alluded to, is found to be cracked. The ponderous thing will be removed in segments and a new one will have to take its place before the engine can recommence work. We are in the street now, and will follow that pale, thoughtful-faced girl to her home. We know something about her, and can guess what the breakdown means in her case. We shall have to go down several steps into a cellar, very clean, but poorly furnished. There is a bed at the far side of it, tenanted by a wan-faced, hollow-eyed woman, evidently the mother of the girl-weaver. There is a little lad of ten sitting on a stool and playing with a kitten, the only sprightly inmate of that poor home. We notice that he uses his left hand, the right being bound up and in a sling. The little fellow usually works as a scavenger in a mill, and earns two shillings a week, but a few days since he met with

an accident which has rendered his right hand helpless for the present. The sick mother and the lame boy depend for their living on the earnings of the young weaver, who wins their bread as well as her own. They are startled by her return at this time of the morning, and her countenance tells that something is wrong. Like a good, brave girl she keeps down her tears, though it is hard work, and tells the bad news of the breakdown so as to depress her sick mother as little as possible. She reminds her mother that she can get some cleaning to do at two or three places, and that little Jack's hand is mending famously, so he will soon be at work again. The mother knows quite well that the odds and ends of work which her daughter can pick up amongst their neighbours will by no means make up for the loss of wages caused by the breakdown. But, though faint and weak in body she is strong in faith, and she comforts her daughter by reminding her of past mercies. "Cast down we have been," she says, "but not forsaken. The same God that raised us up friends and helpers before will care for us now." So the three partake of their poor mid-day meal together, with trustful hearts. And they are not forgotten by Him in whom they place their confidence. A friend who has known the family in better days has heard of the breakdown. Guessing what it means to the tenants of that poor cellar, she comes as the agent of Him without whose knowledge a sparrow cannot fall to the ground, and by her reasonable aid prevents their feeling any ill-effects from the misfortune of the morning.

Every Lancashire person knows that Whitsuntide is the great gala time in the manufacturing districts. Easter is the minor holiday. There is certainly a good deal of sight-seeing and dissipation in connection with Knot Mill Fair, but it is soon over. The wild beast shows, the penny exhibitions, merry-go-rounds, etc., reap their harvest and depart; but "Whissuntide," as Lancashire calls it, is the festival time of the year. We shall not attempt to describe the Whitsuntide doings in this paper, but our breakdown has some connection therewith. Hence the allusion. Whitsuntide is the season at which everybody comes out in new clothing. The seven weeks' interval between it and Easter is always spent in hard work, and every penny that can be hoarded is carefully laid by towards paying for Whitsuntide finery. Something is usually done long before this time, but the grand push is between Easter and the gala week itself. Some of the women weavers are mothers of families, and are straining every nerve that their children may cut a good figure in the great procession of Sunday scholars, which is a sight by itself. To the little scholars expectant of new clothes, the breakdown which loses "mother" a fortnight's work means a diminution, to say the least, in their new things. The hats will have less ribbon, and the frocks, if procured at all, must be of a cheaper material and scantier make.

What a long way the effects of the breakdown extend! We are not yet at the end of them. Whitsuntide is the great marrying season in our city of mills and tall chimneys. The matrimonial business is a wholesale one during Whit-week. Besides the mothers who were saving towards the clothing of their children, there are young women preparing for "the holy estate," whose wedding feast and apparel depend on the work of their own hands. Let us hope that the breakdown will be to them a warning, and show them that they must not spend all as it

comes in, but must lay by a portion of their earnings to supply the wants of the proverbially "rainy day" which may be, for aught we know, a future breakdown.

We will glance through other parts of the mill. The winders and warp-makers at the very top of the building are not affected. No more are the doublers, who twist the exceedingly fine-spun threads together for the Nottingham lace market. Here is a scene of life and activity, and those fine cobweb-like lines are being twined together as fast as usual.

We cannot help noticing a pretty and curious process which is going on at what are called the "gassing frames," in the doubling department. These frames hold many rows of little gas jets, and through each flame a thread is travelling. When our eyes were new to Lancashire, we thought it impossible that those fine threads could pass through the lighted gas and sustain no injury. But the value of the process was explained by comparing two hanks of doubled thread. The one before gassing was as if studded with minute hairs. The other thread was beautifully smooth. The journey through the little jet of gas had singed off all those hairs, without injuring the thread in the least. The doubling, warping, and gassing machinery is all turned by a second engine, so the breakdown has not affected these departments.

It is otherwise with the spinning-rooms. In them the mules, jack frames, and carding engines are all still, and hopelessly so. These must remain inactive till the broken engine is repaired, for the work to be done is too heavy for any makeshift. There are many disconsolate-looking faces about the doorway. Mule-spinners, jack-tenters, and carders, forming a mixed group of men and women, are out of work owing to this far-reaching breakdown. There is a little remorse mingled with their other feelings. These hands last week would not work. Even while well aware that their employer was as much pressed to get his goods away as were his neighbours, the spindle-maker and weaver, they preferred the dissipation of Knot Mill Fair, and laughed at his perplexities. They now, though unwillingly, share his trouble. They are ready enough to work, in order to refill their empty pockets, but they may go home again, and during their enforced idleness learn a lesson of wisdom from the breakdown.

Before we leave the premises altogether, we must just see how the work of repair is progressing. It is two days since the breakdown, and we are more than ever astonished at the mechanical appliances of these go-ahead days. We find that the attempt to utilise the second engine is certain to be successful, as regards the weaving shed. On Monday morning the looms will all be at work again. Our spindle manufacturer, too, is not to be outdone. He is a man of brains, and he means business. He has actually brought a portable steam-engine into the yard adjoining his works, and a portion of his wheels will be whirling again when the shuttles begin to fly in his neighbour's sheds on Monday morning. We see the mechanics from the great engineering establishment to whom the repairs are entrusted have a weary look. And well they may. They have been at work all night, and a great part of the day as well. Their meals have been brought to the mill, and their little children have looked in vain for the return of the fathers at the usual times. These men will go off home directly, and will be succeeded by

other workers, who will continue at their labours until eleven o'clock to-night. Then the repairs will be at a standstill until the small hours on Monday morning, for though Sunday work is permitted in some mills under similar circumstances, it is not so here. We may, therefore, go home now, and while we think of the vast number of persons affected for so long a time by the mischief done in a few seconds, we may also hope that the mill may not be the scene of another breakdown.

THIRTY YEARS OF THE REIGN OF VICTORIA.

PERSONAL RECOLLECTIONS BY JOHN TIMBS.

V.

In the spring of 1840 I read in the newspapers of the death of Sir Richard Phillips, in the seventy-third year of his age, at Devonshire Place, Brighton, whither he had retired many years before. To this brief record was added, "he was Sheriff of London and Middlesex, 1807-8, and the humane founder of the Sheriffs' Fund for the relief of distressed prisoners." No better characteristic could be conveyed of his humanity and benevolent nature, and his sympathy for those struggling in the stream of life. I am not unmindful that of men's actions in this world—

"The good is oft interred with their bones."

This, however, has not been the case in the present instance; for the Sheriffs' Fund Society exists to this day, and its capital consists of some £14,000 stock, invested in the names of four trustees, all ex-sheriffs. The society is managed by a committee of twelve, headed by the Lord Mayor; and a report of its operations is published every year by the Rev. F. E. Lloyd Jones, the Ordinary of Newgate, who is the honorary secretary. The fund was established by Sheriffs Phillips and C. Smith; but the former sheriff appears to have taken the lead in the details of the society, and he published during his shrievalty, in "Letters to the Livery of London" on the office of sheriff, a very interesting account of this humane society. A copy of this book lies before me, and the title-page is inscribed, "With the Author's best compliments to his worthy friend Mr. D'Israeli." The object of the Fund is to relieve the distressed families of prisoners; to afford temporary provision to persons who, on being discharged from prison, have no means of subsistence; to purchase tools, implements, and materials for prisoners on their release, to enable them to earn a living, and for other objects. This feeling of sympathy on behalf of criminals has never subsided. The benevolent Sheriff, to whose humanity we owe this excellent society, has been often incidentally mentioned in these Recollections; and it may still be interesting to sketch an outline of his active public life, more especially as his autobiography, which he had commenced writing, is stated to have been destroyed.

Richard Phillips was born in London in 1767, and was brought up with an uncle, the proprietor of the Lion Brewery, in Soho, to which he was heir. He was educated at Chiswick, where he soon showed a genius for English composition, and the science of numbers, rather than a taste for classical studies; to which cause may be referred the singularly vernacular style of his writings, and the entire absence of

classical ornament in his felicitous illustrations for the largest class of readers. Of his schooldom I have heard him relate many amusing anecdotes; but although there are in the majority of these reminiscences indications of a superior intellect, and an originality of mind and purpose, such as are usually father to the bright man, I prefer quoting a passage in this boyhood from his "Morning's Walk from London to Kew;" the mainspring of these graphic reflections being the author's accidentally hearing in after-life the bells of Chiswick Church. "The recurring tones," he observes, "produced correspondent vibrations on my nerves, and I felt myself played upon like a concordant musical instrument. Presently, however, it occurred to me that I was not an entire stranger to the tunes of these bells, and that part of their fascination arose from an association between them and some of the earliest and dearest objects in my remembrance. 'Surely,' I exclaimed, 'they are *Chiswick Bells*; the very bells under the sound of which I received part of my education, and, as a schoolboy, passed the happiest days of my life! Well may their tones vibrate in my inmost soul, and kindle uncommon sympathies!' I now recollected that the winding of the river (Thames) must have brought me nearer to that simple and primitive village than the profusion of wood had permitted me to perceive, and my nerves had been unconsciously acted upon by tones which served the keys to all the associations connected with these bells, their church, and the village of Chiswick. I listened again, and now discriminated the identical sounds which I had not heard during a period of more than thirty years. I distinguished very words in the successive tones which the schoolboys and puerile imaginations of Chiswick used to combine with them. In fancy I became a schoolboy—'Yes,' said I, 'the six bells repeat the village legend, and tell me that *my dum cow has just calved*, exactly as they did about thirty years since!' Did the reader ever encounter a similar keynote, leading to a multitude of early and vivid impressions? for, in like manner, these sympathetic tones brought before my imagination numberless incidents, personages, no longer important, or no longer in existence. My scattered and once loved schoolmates, their characters, and their various fortunes, passed in rapid review before me; my schoolmaster, his wife, and all the gentry, and heads of families, whose orderly attendance at Divine service on Sundays, with those remembered bells ' chiming for church,' (but now departed and mouldering in the adjoining graves,) were rapidly presented to my recollection. With what pomp and form they used to enter and depart from the house of God! I saw with the mind's eye the widow Hogarth and her maiden relative, Richardson, walking up the aisle, dressed in their silken sacs, their raised head-dresses, their black calashes, their lace ruffles, and their high crooked canes, preceded by their agent-servant, Samuel, who, after he had wheeled his mistress to church in her Bath chair, carried the prayer-book up the aisle, and opened and shut the pew! There, too, was the portly Dr. Griffiths, of the 'Monthly Review,' with his literary wife, in her neat and elevated wire-winged cap! And oftentimes the vivacious Duchess of Devonshire, whose bloom had not then suffered from the cankerworm of pecuniary distress, created by the luxury of charity! Nor could I forget the humble distinction of the aged sexton, Mortefee, whose skill in psalmody enabled him to lead the wretched group of

it was rebuilt, but the charm of the old place had fled. "Chelsea buns" formed a frequent cry in the streets of London in the last century.

Since my reference to the periods at which appeared "Chambers's Edinburgh Journal" and the "Penny Magazine," Mr. William Chambers has addressed to the "Athenæum" "the simple truth," as follows:—"In the beginning of January, 1832, I conceived the idea of a cheap weekly periodical devoted to wholesome popular instruction, blended with original amusing matter, without any knowledge whatever of a prospectus of the 'Penny Magazine,' or even hearing that such a thing was in contemplation. My periodical was to be entitled 'Chambers's Edinburgh Journal,' and the first number was to appear on the 4th of February. In compliment to Lord Brougham, as an educationist, I forwarded to him a copy of my prospectus, with a note explaining the nature of my attempt to aid, as far as I was able, in the great cause with which his name was identified. To this communication I received no reply, but the circumstance wounded no self-love. My work was successful, and I was too busy to give any consideration as to what his lordship thought of it. The first time I heard of the projected 'Penny Magazine' was about a month after the 'Journal' was set on foot and in general circulation."

I may here explain the absence of the Duchess of Kent and the Princess Victoria from the coronation of King William IV and Queen Adelaide, for which absence various causes were assigned. The authorised and correct explanation was as follows: The Duchess did not refuse to attend the ceremony, as was stated at the time, nor did she find fault with no place being set apart for the Princess Victoria, who, as heir-presumptive, was not even recognised by the Constitution. Every preparation had, in fact, been made for the attendance of the Duchess. The real cause of her absence was the delicate state of the young Princess's habit of body, and the risk to which a long and hasty journey might expose her. This excuse was stated to the King, who, with his accustomed kindness, cheerfully and at once allowed it.

I have been favoured by an accredited correspondent with the following correction of the statement that Alderman Matthew Wood alone advanced a large sum of money to enable the Duke and Duchess of Kent to return to England, that our present gracious Queen might be born an Englishwoman. "There were three persons: Alderman Wood, and the late Earl Fitzwilliam; the third is unknown, but a silver salver was presented to each by the Queen on her coming to the Throne, when the money was repaid." A second correspondent adds: "Alderman Wood may have furnished part of the needed funds; but the late Lords Zetland and Fitzwilliam, I believe, each advanced £5,000. Her Majesty, previous to her marriage, sent Lord Zetland the money, together with a gold salver and an autograph."

Varieties.

FLETCHER OF SALTOUN.—Whatever his faults may have been, the honesty and patriotism of Andrew Fletcher were unquestionable. On the other hand, his temper was so impracticable, and his views so singular, that he passed his political

life as a parliamentary free lance, and effected little direct good; but his presence in the Scotch Estates was of great value. He was one of the few Scotchmen of that age who had travelled on the Continent—a circumstance which gave him wider and more independent ideas than his fellows, but which seems also to have had the effect of severing him in sympathy and interests from the great body of his countrymen. His first appearance in public life was when he spoke his mind against James, Duke of York, then Viceroy of Scotland. For this he fled to Holland. Holland was then indeed the sole refuge of political virtue and religious liberty. He afterwards returned to England to take part in Lord Russell's conspiracy with his friend Baillie. When the plot was discovered, Fletcher escaped, while Baillie was seized and executed, for although offered his life on condition of betraying Fletcher, he preferred to die. After two years spent in travel and political study, Fletcher joined the ill-fated expedition of Monmouth; but it had hardly landed before he had in some paltry quarrel killed the Mayor of Lyme. This obliged him to fly, and the incidents of his flight read like a chapter of Defoe or Lever. Leaving England, he embarked in a vessel bound for Spain. On arriving there, however, he was at once thrown into prison on the application of the English ambassador, and kept there till he could be sent to England. From this desperate condition he was released by a mysterious agency. Looking one day through the bars of his dungeon, he saw a "venerable person" making signs to him. By these signs he discovered an open door, through which, and a guard of sleeping soldiers, he passed in company with his deliverer. Who that deliverer was, or whose agent, Fletcher never knew. In disguise he now travelled through Spain, whence he finally escaped to serve as a volunteer in Hungary till the Revolution enabled him to return to Scotland. There he took a prominent part both in the debates of Parliament and the formation of the Darien Company. He ardently opposed the union, as he believed it to be a death-blow to the freedom and independence of the country. In politics he voted with neither of the sides that bore a name in that day. He used to say that the names of Whig and Tory "were given and used to cloak the knaves on both sides." He belonged to a party rare in Scotland at that time, if indeed it was not limited to himself, but which Mr. Disraeli tells us governed Great Britain for nearly a century and a half; he was a Venetian republican. He dreamed of Athens and of Rome; of a grateful country ruled by an intellectual oligarchy; of a State where all men should be entirely equal, but ruled entirely by the aristocracy; on the whole, his Utopia, as far as we can know it, closely resembled a Venetian Republic. Of the people, he seems to have thought but little; in any relation except as subjects not at all. He was an advocate for the ballot, not indeed as we advocate it now, as a protection for the constituencies against corruption and intimidation, but as a protection for the representatives against the constituencies and the court. His temper was violent, and his temperament irreconcilable; and though for these reasons he could never be supported by a party, his eloquence, nervous, argumentative, and classical, made him the foremost man in the Scotch Parliament.—*Earl of Roseberry's Address on the Scottish Union, at Edinburgh Philosophical Institution.*

ATONEMENT.—We are not yet arrived to so great a pitch of infidelity as to deny the existence of a God; every work of creation loudly confutes this hypothesis. But there are many who cannot receive the doctrine of a Saviour suffering for mankind, the merits of whose death are imputed to them; they love rather to distort the meaning of Scripture, and to explain it contrary to the rules of sound criticism; they had rather reject the whole, than agree to the opinion that man stood in need of a ransom. We should have less reason to expostulate with these men than with the atheists, if it was not proved that the doctrines revealed are the word of God and of truth. But to acknowledge the divine origin of the Christian religion, and refuse to believe that Jesus died for us, and that he hath reconciled us to God, is an inexcusable contradiction, as well of itself, as of the truth which it admitted. It was not possible to express in terms more clear than revelation hath expressed them, these important doctrines—that men, by their sins, had forfeited the favour of God; but that God, out of his infinite love, had promised them, by his prophets, that he would send his only Son into the world; that he accordingly came at the appointed time, and, in conformity to the prophecies, suffered and was put to death; that his sufferings have satisfied the Divine justice; that he hath purchased the pardon of sins to all those who believe in him, and hath rendered them capable of inheriting eternal life; and, lastly, that there is no other way to satisfy the justice of God, than by faith in his Son.—*Baron Haller, the Physiologist.*

PRIDE.—Many of the sins to which we are subject remain buried with us in the grave. The love of voluptuousness follows us not to eternity, any more than avarice. The first of these vices has no means of gratification when the soul is separated from the body, which was so necessary to the enjoyment of this kind of satisfaction; the other will be deprived of its object in a place where the metal it was so fond of amassing will not be found.—But there is another vice much more odious, which hath a powerful influence over the soul, and which may follow it into the world of spirits. This vice infected the seraphims, and was productive of much vexation in the habitations of the just. The vice I mean is pride. Human virtue, imperfect as it is, is often tarnished with this fault—a fault more odious to God than any other, and which may even render us unhappy in heaven itself.—*Haller.*

CO-OPERATING GRACE.—I must confess that the manner of the co-operation of grace is an inexplicable mystery; it is, however, a revealed truth. The mode of its acting is too obscure for us to comprehend. We know not the laws of the actions of spirits. We know not the manner by which one body moves another. How then shall we discern the method by which one spirit acts upon another spirit? Perhaps if we too clearly perceived the operation of grace upon our minds, it might be an obstacle to the exercise of our liberty.—*Haller.*

EXAMINATIONS OF SUNDAY SCHOOL TEACHERS.—Early in the year 1870 the committee of the Sunday School Union, at the suggestion of a London minister (Rev. W. G. Lewis), resolved to attempt to apply the system of competitive examinations to the teachers of the schools connected with the society. A first effort was made in the summer of that year, when 154 London teachers presented themselves for examination in a portion of Scripture history. This was followed by a second Scripture examination in February, 1871, which was extended to provincial schools, fifteen cities and towns being selected as local centres. More than 300 candidates came forward, of whom 250 passed a somewhat difficult examination, on "the state of Palestine and the Jewish people in the time of Christ." The movement was now regarded as so decided a success that the committee determined to make arrangements for holding examinations annually—in London and the country—in "Scripture," "Christian evidences," and "the principles and art of teaching"—a "preliminary" or junior examination in January, and an "advanced" examination in June. Prizes of books and certificates were to be awarded to successful competitors. The first "preliminary" examination has just been held. It took place simultaneously in London and forty-three provincial cities and towns, and occupied three evenings. The number of candidates was 579. The committee of the various local unions superintended the arrangements at the different centres. The appointed examiners were the Rev. Professor Green, D.D., of Rawdon College, Leeds; the Rev. LL. D. Bevan, LL.B.; and Mr. W. H. Groser, B.Sc., F.G.S., of London. This new and important movement can hardly fail to exert a beneficial influence on the standard of efficiency prevailing in the Sunday schools of this country. It is stated that in the examinations already reported the number of "passes" was remarkably large, and the average merit of the papers high.

ITALIAN WORSHIP.—As one instance of the little influence the religion of the Italians has upon their morals, Mr. Powers told a story of one of his servants, who desired leave to set up a small shrine in their room—a cheap print, or bas-relief, or image, such as are sold everywhere at the shops—and to burn a lamp before it; she, of course, engaging to supply the oil at her own expense. By-and-by her oil-flask seemed to possess a miraculous property of replenishing itself, and Mr. Powers took measures to ascertain where the oil came from. It turned out that the servant had all the time been stealing the oil from them, and keeping up her daily sacrifice and worship to the Virgin by this constant theft.—*Hawthorne's Note-books in France and Italy.*

PICTORIAL ALPHABETS.—The forms in this Moabite inscription strongly favour the view maintained by Gesenius, Bunsen, Rawlinson, and others, that the original Phœnician writing was pictorial, resembling in this respect that of the Egyptians and most probably of the Babylonians. By degrees these pictorial letters were simplified by reducing them to forms which could easily be traced without moving the hand from the paper, but in the effort after simplicity much of the original meaning was sacrificed. It is a curious thing that some of the beautiful little pictorial books which this nineteenth century has invented, in order to wile our children into the art of reading, have returned to this primitive idea, and give pictures of common objects to illustrate or impress the letters of the alphabet. Thus in "Reading without Tears," we have Mary rolling her hoop to familiarise the eye with O, and Johnny with his *hurl* to convey the form of

J, and a *serpent* twisting into an unmistakable S, and a *wind-mill* revolving into an unmitigated X, and a *pillar-post* erecting itself into an undeniable I, and so on. But how little did the compilers imagine that they were bringing us back, if not to the world's second childhood, at least to a very good imitation of its early youth, and adding another illustration to the axiom of Ecclesiastes, that "there is nothing new under the sun." Have you ever observed the resemblance between the occult characters on our ancient Ogham stones, and the signs used in our telegraph offices? Here, again, in the culminating point of human science, we go back to the cradle of learning.—*The Moabite Stone. By W. Pakenham Walsh. (Herbert, Dublin.)*

HENRY WARD BEECHER'S YOUTH.—The Rev. Henry Ward Beecher, in a recent "lecture-room talk" on "The Religious Duty of Thanksgiving," gave the following account of his early experiences as a minister:—"I do not believe that to-day I feel as thankful for the comforts of my house as I did when I first began to preach, and had two rooms, and felt that they were mine, and went around among the people of the neighbourhood with the thought, 'Was there ever a man so happy as I am?' Well, I may as well tell you—when I began to preach I never expected to do much. But I meant to do as well as I could. I never expected to go anywhere. I was asked to cross the river from Cincinnati and preach in Covington, and I went over and began to preach there. I did not know but I was going to stay there. And I was perfectly willing to stay. But I was soon called by a woman to Lawrenceburg. She was the factotum of the whole church. And I went there and spoke to a well-nigh empty building. I was settled over a town with two distilleries and twenty devils in it. I was very poor. There was no patrimony coming to me, as you know. The moment I was out of the seminary I was without my father's support, and was obliged to take care of myself. I had a salary; but it was a salary of 400 dols. And I took half of that to go to New England to get married with. And as the parish paid only half of it, and the other half was to come from the Missionary Society, I found myself very short of funds. I had just eighteen cents in my pocket when I came back. I was taken up by a good Methodist brother for about a week, and then I got these two rooms to which I have alluded. They were up-stairs. One was the kitchen, cellar, and sitting-room; the other was the library, bedroom, and parlour. So that we had six rooms, calling each three. The cellar was made by putting things under the bed; and the other rooms were added by sundry devices. You who go into flash houses, furnished by your grandpas and grandmamas, do not know anything about the joys of housekeeping. Persons ought to begin at the bottom, to know what those joys are. And I began down there. I had no idea that I could preach. I never expected that I could accomplish much. I merely went to work with the feeling, 'I will do as well as I can, and I will stick to it, if the Lord pleases, and fight his battle the best way I know how.' And I was as thankful as I could be. Nobody ever sent me a spare-rib that I did not thank God for the kindness which was shown me. I recollect when Judge — gave me his cast-off clothing I felt that I was sumptuously clothed. I wore old coats and second-hand shirts for two or three years; and I was not above it either—although sometimes, as I was a somewhat well-developed man, and the judge was thin, and his legs were slim, they were rather a tight fit."

HOME INFLUENCE.—We are proud of France, and with good reason; but it is not right for us to despise other countries. There are countries of Europe which are of value to us in many relations, and may well serve us as models. Let me cite a touching example of primary instruction as it is given at the family fireside in certain parts of Norway. In these mountainous regions, so sombre and sad in their gentle beauty, but so rugged in climate during the cold season, the summer is devoted to the culture of the fields, the winter to the household. It gathers, then, about the fireside, the radiant centre of light and heat both for body and for soul, and there the education of the children is taken in hand. The most aged of the family overlook the task; the mother and the elder sisters are the teachers, aided commonly by the travelling schoolmaster, a household pilgrim, whose business takes him about through the snow-paths, with his little baggage of Christian science and natural history and poetry. Beside the schoolmaster, and sometimes in his vacant chair, sits the minister of religion—a Protestant minister, I know, but ordinarily a man who has kept the vital principle of Christianity, with the faith of Christ and the morality of the gospel. At this house-school is forming, day by day, the character of generations in whom the religious and patriotic sentiments are far stronger and more closely united than with us.—*Father Hyacinthe at Notre Dame.*